Case I - O'Henry's 'New' API console

Studio A at O'Henry's Recording Studios in Burbank, CA is a popular movie scoring facility.&#65533; The large studio and multiple isolation rooms provide adequate space for orchestras up to 75 pieces.&#65533; The main drawing card, however, was the warm sound of the classic API console.&#65533; Unfortunately, newer recording techniques now require more facilities than the 8-bus, 48-input console provided.

The common solution to this problem is to replace the old console with a modern new megaconsole.&#65533; In fact, O'Henry's had previously replaced their highly modified Trident console in Studio B with a large SSL 9000J console.&#65533; The downsides of this approach for O'Henry's Studio A were the very high purchase cost and the relatively sterile sound of the newer consoles.&#65533; All the recording engineers begged for preserving the distinctive warm API sound that brought them to O'Henry's.&#65533; Hank Sanicola, O'Henry's owner, realized that he would loose his distinctive position in the competitive market if he became 'just another SSL room.'

Hank decided to upgrade the size and facilities of the API console while preserving the basic signal path and characteristic sound.&#65533; The 8-bus routing would be replaced by 24-bus modules with a cascaded summing structure to minimize noise.&#65533; The limited metering of the old design would be replaced by full metering on all inputs and buses, and include automatic mode switching.&#65533; A new monitor control panel would provide versatile surround monitoring options and a control panel for a Martinsound MultiMax.&#65533; Minor improvements to the input modules would provide features such as transformer isolation of the insert points.

The key part of the plan was to not shut down the studio while the console was modified.&#65533; Many studios have gone under when the console modifications stretched from the optimistic first estimates of a few weeks to the reality of many months, killing the studio's incoming cash flow while construction expenses piled up.&#65533;

Hank's plan was first to construct a completely new console frame with new motherboards and the new operating facilities, and then transplant the API input and equalizer modules from the old console only when the new console was moved into the control room.&#65533; The project would also include remodeling of the control room and the studio to improve acoustics and add new features.

The modifications to the console would require stretching the console in all directions.&#65533; Expanding the console to 88 channels required a structure that reached 16 feet in width.&#65533; Since the old API frame had proven to be of marginal rigidity, the new design would sit on a welded frame constructed from 2" x 4" rectangular steel tubing.&#65533; The new design still had 8 channels per bucket, but the buss summing grouped 3 adjacent buckets into a 24-channel bussing cluster to allow the numerous summing amps to be spread evenly across the console.&#65533; These summing amps were placed on crosswise modules that can be removed from the top for convenient servicing.

The profile of the console retained the classic API curvature to permit easier viewing and reach for the buss assignment and equalizer modules at the rear of the work surface.&#65533;

The full-width metering pod included large illuminated Sifam VU meters for each channel.&#65533; The 8-channel meter assemblies in each bucket also included differential input buffer amps with 4-way multiplexers on each channel.&#65533; The final design included special meter masking and low-glare glass to yield even illumination without any reflected images of the overhead room lights.

The rear of the console housed underslung card cages and shelves for the buss and monitor summing amplifiers, Flying Faders servo and power supply chasses, and auxiliary items.&#65533; The center card rack required a re-design to stiffen the PC card supports when the full complement of transformer-laden PC boards was finally installed.

All of the metalwork for the console was custom-fabricated and finished by local vendors.&#65533; The left and right halves of the console were pre-assembled prior to delivery to O'Henry's facility.&#65533;

Harold Kilianski, chief tech at O'Henry's, and his crew assembled and mounted the various motherboards and wired the power and signal paths.&#65533; All signal lines to the patchbay, which was mounted in the credenza behind the recording engineer, were terminated on Elco connectors to facilitate testing during assembly and to provide for future console modifications.

As is typical for these projects, the workload to completely wire a custom 88-channel console was underestimated, but Hank's strategy of keeping the old console in place avoided any unnecessary interruption of recording sessions.&#65533;

Once the new console was wired and tested, the studio was shut down for 8 weeks.&#65533; The control room was gutted and new troughs, conduits and wiring were installed into the floor.&#65533; Once the new raised floor was completed, the new console was rolled from the assembly area to the control room.&#65533; Several wiring techs worked feverishly to install all the necessary lines for microphones, tape machine inputs and outputs, tie lines and patch bay links.

Once the old console was removed from service, the Flying Faders system was removed for reconditioning and expansion.&#65533; Although originally installed in 1988 as the third Beta Test Flying Faders system, all of the components were still in excellent condition.&#65533; The faders were cleaned and upgraded with new sliders and end

caps that better retain the silicone oil, providing smoother operation and longer intervals between servicing.&#65533; The system was expanded with additional new faders from Martinsound to accommodate 88 inputs, and additional grouping faders were added to the monitor section.

As fate would have it, the first session for the new console was a full orchestra date.&#65533; Final 'touchup' tasks continued in the background for several weeks, but the console was immediately judged to be outstanding.&#65533; The warm sound had indeed been preserved, and the big-name scoring engineers appreciated the new versatility and expanded capability.&#65533; Yes, the project took longer and cost more than originally anticipated, but the results were also more than originally sought.&#65533; The console is indeed a unique mix of old sound and new facilities that preserves O'Henry's reputation as a highly desirable studio for the best of the scoring mixers.&#65533; Mission accomplished!!

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